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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/866,895 | 05/29/2001 | Xiaodc Xu | 2821.1002-000 | 5585 |
| 21005 7590 03/22/2007 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133 | | | EXAMINER SHARMA, SUJATHA R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2618 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 03/22/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/866,895

Applicant(s)

XU ET AL.

Examiner

Sujatha Sharma

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/11/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-23, 25-35, 37-47 and 49-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-23, 25-35, 37-47 and 49-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

The applicant argues that Paavonen and Funk fail to teach specific steps as recited in the claims. The applicant argues that Funk does describe the handling of calls in an Originating Switch 121 according to a Class of Service (COS) code in a telephone network whereas in the applicant's invention the process occurs in the mobile unit, of using the phone number to locate a service code in a cause table that maps phone numbers to service codes. This service code is then used by the mobile station to identify a service when sending a connection request to the base station switch.

The examiner respectfully disagrees. The examiner would like to point out that the claim does not specifically indicate that the process of using the phone number to locate a service code in a cause table that maps phone numbers to service codes occurs in the mobile phone. The claim recites in the first step that the mobile phone receives a phone number indicating a private service supported by the private network and in the next step the claim recites the process of using the phone number to locate a service code in a cause table that maps phone numbers to service codes occurs in the mobile phone. But nowhere does it very clearly point out that the second d step occurs in the mobile phone. As the applicant has pointed out Funk teaches a method where this feature takes place in the network and therefore the combination of Paavonen and Funk meet the limitations of the claimed features.

Therefore the rejection of the claims 1-11,13-23,25-35,37-47 and 49-72 as submitted in the previous office action (mailed on 7/18/06) and as discussed below is considered proper.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,9-11,13,21-23,25,33-35,37,45-47,49-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paavonen [US 5,634,197] in view of Funk [US 5,634,197].

Regarding claims 1,9-11,13,21-23,25,33-35,37,45-47, Paavonen discloses a method of establishing a high priority call in a mobile radio system. Paavonen further discloses a method of

- receiving a request at a mobile station to originate a special service call (SCS), such as an emergency call. See col. 1, lines 38-44.
- sending the request message from the mobile station to base station equipment for call setup within the private network. See col. 1, lines 38-44.

However, Paavonen fails to disclose a method comprising:

- the call request specifying a phone number associated with a private service that is supported by the private network;
- using the phone number to locate a service code in a cause table that maps phone numbers to service codes wherein the service code identifies the private service;
- coding a service type field contained in a request message to indicate the private service identified by the located service code;

Funk, in the same field of endeavor, teaches a method comprising:

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- the call request specifying a phone number associated with a private service that is supported by the private network; see col. 4, lines 30-48, col. 9, lines 50-58
- using the phone number to locate a service code in a cause table that maps phone numbers to service codes wherein the service code identifies the private service: see col. 4, lines 39 – col. 5, line 60, col. 6, lines 27-37
- coding a service type field contained in a request message to indicate the private service identified by the located service code; see col. 4, lines 39 – col. 5, line 60, col. 6, lines 27-37

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Funk to Paavonen for a more efficient call routing in an accurate and timely fashion.

Regarding claims 49,54,55,60,61,66,67,72, Paavonen further discloses a method wherein the wireless communication system is deployed to provide call services to mobile stations operating in a private network, the method comprising the steps of:

- receiving a request message for a new special call services (SCS) call, wherein the request message specifies a private service that is specially supported by the private network. See col. 1, line 38 – col. 2, line 67
- granting resources to service the new SCS call depending upon the private service specified in the request message and a state of other existing calls in the private network. See col. 1, lines 38-59

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Regarding claims 50,51,56,57,62,63,68,69, Paavonen further discloses a method comprising the step of dropping a normal call-in-process in the private network in order to accommodate the new SCS call. See col. 1, line 38 – col. 2, line 67

Regarding claim 52,58,64,70, Paavonen further discloses a method wherein the request message specifies a priority of the new SCS call. See col. 2, line 60 – col. 3, line 10 where the identifier identifies the high priority or the emergency call.

Regarding claims 53,59,65,71 Paavonen further discloses a method comprising the step of dropping a normal call-in-process in the private network in order to accommodate the new SCS call. See col. 1, line 38 – col. 2, line 67

1. Claims 2-8,14-20,26-32,38-44,are rejected under 35 U.S.C. 103(a) as being unpatentable over Paavonen [US 5,634,197] and Funk [US 5,634,197] in view of GSM standards 04.08 V7.1.2 Release 1998 (herein after GSM 4.08) and further in view of Admitted prior Art (APA page 3, lines 8-15).

Regarding claims 2,14,26,38, Paavonen as treated in claims 1 discloses all the limitations as claimed. However they do not disclose a method wherein the wireless communication system operates according to certain functional layers, including radio resource (RR) functional layer, a mobility management (MM) layer and a connection management (CM) layer, with the RR functional layer being normally assumed to be a transport mechanism for the MM and CM layer functions.

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The applicant has admitted (herein after APA) on page 3, lines 8-15, the GSM standard for a wireless communication system operating according to certain functional layers, including radio resource (RR) functional layer, a mobility management (MM) layer and a connection management (CM) layer, with the RR functional layer being normally assumed to be a transport mechanism for the MM and CM layer functions.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to use the above taught GSM standard to implement the modified Paavonen's system as a best choice of engineering design.

Regarding claims 3,15,27,39, APA further discloses a GSM system. See page 3, lines 8-15.

Regarding claim 4,16,28,40, GSM 4.08 further teaches a method wherein the service type field in the SCS request message is defined using reserved GSM service type codes. See table 9.2.11, Fig. 10.5.77, and table 10.5.91.

Regarding claim 5,17,29,41, APA further discloses a method wherein the service request message is coded at a MM layer. See page 3, lines 4-22.

Regarding claim 6,18,30,42, Paavonen further discloses a method of detecting a newly added SCS call request and allocating resources to service the request depending upon the SCS cause type and a state of other call types already in progress. See col. 1, lines 38-50.

Regarding claim 7,19,31,43, Paavonen further discloses a method wherein the step of granting physical resources comprises of the step of dropping a normal call in progress in order to accommodate the SCS call if there are no other free physical resources left and prioritizing the SCS call. See col. 1, lines 38-50.

Regarding claim 8,20,32,44, Paavonen further discloses a method of allocating radio resources to the call that are reserved for servicing SCS calls. See col. 1, lines 38-50.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Raith [US 6,477,362] System and methods for providing information to emergency service centers

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 571-272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sujatha Sharma
March 12, 2007


MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER